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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,836	06/22/2001	James S. Bradley	CFP-31802/02	7856

7590

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EXAMINER

AUGHENBAUGH, WALTER

ART UNIT	PAPER NUMBER
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1772

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DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/887,836

Applicant(s)

BRADLEY, JAMES S.

Examiner

Walter B Aughenbaugh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 11-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-12 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5, 11 and 12, drawn to a packaging laminate and a resealable package closure, classified in class 428, subclass 35.8.
 - II. Claims 6-9, drawn to a process of forming a packaging laminate, classified in class 156, subclass 60.
 - III. Claim 10, drawn to an adhesive mixture, classified in class 523, subclass 1.
2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as coextrusion.
3. Inventions III and I are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as an interior adhesive layer bonding two layers together in a multilayer film, and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this

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is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. Inventions II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as a process utilizing a solvent with the adhesive material.

5. During a telephone conversation with Avery N. Goldstein on August 30, 2002 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-5, 11 and 12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-10 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1,2 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 1, the phrase “an adhesive layer in contact between said outer and inner layers” is indefinite. It is not clear what the adhesive layer is recited as being in contact with. Examiner suggests amending to “an adhesive layer between said outer and inner layers, and in contact with both said outer and inner layers”.

In regard to claim 2, the abbreviations PET, OPP and PE, must be written out in full. “PE” and “OPP” are recited twice (OPP- end of line 3, PE-beginning of line 4). It is unclear what “PET OPP” (beginning line 3) is intended to mean- a PET/OPP copolymer? It is unclear what “acrylic coated OPP and PET” (line 4) is intended to mean- an acrylic coated PET/OPP copolymer or “acrylic coated PET or acrylic coated OPP”?

In regard to claim 12, it is unclear what portion of claim 12 that the phrase “such that said adhesive resealably attaches to a portion of said package” is intended to qualify. Claim 12 reads as if the claimed concentration range of antioxidant is chosen such that the adhesive resealably attaches; however, the amount of antioxidant within the claimed range should not have an effect on the adhesive capability of the adhesive composition. What limitations of claim 12 enable the adhesive to be resealably attached? Furthermore, the phrase “resealably attaches” needs to be clarified. What is “resealably” intended to mean?

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 11 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Omura et al.

Omura et al. teach an adhesive composition for forming an adhesive film (col. 5, lines 50-56). The composition comprises a resin that consists of one of the polymerizable monomers disclosed on col. 6, lines 7-42. The composition also comprises a curing agent (col. 6, lines 42); therefore, the resin is cured. Omura et al. teach the inclusion of the antioxidant 2,6-di-tert-butyl-p-cresol (BHT), also known as butylated hydroxytoluene in the amount of up to a maximum of 10 parts per 100 parts by weight of the polymerizable monomers (col. 31, line 22), corresponding to a maximum of 100,000 parts per million; the claimed range of Omura et al. consequently overlaps with the claimed range of the instant application.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valyi in view of Satoh et al.

Valyi teaches a multilayer container with two plastic barrier layers 83 and 84 that sandwich a carrier layer 85 that contains a getter 86 uniformly dispersed throughout (col. 7, lines 38-43 and Figure 6). Valyi teaches that the getter, if the intended function is prevention of oxidation, is an antioxidant such as butylated hydroxyanisole (col. 4, lines 29-31). The barrier layers have substantial but incomplete resistance to gas permeation (col. 2, 24-25). Valyi also teaches that a suitable polymer for the barrier layers is polyvinylidene dichloride (col. 4, lines 3-8). Valyi fails to teach that the inner layer has a gas transmission rate that is greater than that of said outer layer, that the middle layer 85 is an adhesive layer, and that the middle layer comprises an adhesive resin and a curing agent. Satoh et al., however, teach a thermoplastic laminate film comprising an improved adhesion layer formed from a resin composition comprising a polyester graft copolymer and a polyurethane resin (col. 2, lines 18-29), where the film has superior adhesion between a substrate and the improved adhesion layer (col. 2, lines 9-12). Satoh et al. further teach the inclusion of a curing agent in the resin composition (col. 17, lines 19-20) and the inclusion of an antioxidant (col. 4, line 15). Since this film has superior adhesion between a substrate and the improved adhesion layer as taught by Satoh et al., one of ordinary skill in the art would have recognized to use the resin composition comprising polyester and polyurethane as the material of the carrier layer 85 of Valyi, along with an antioxidant as

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taught by both Valyi and Satoh et al., as an adhesive layer, that bonds plastic barrier layers 83 and 84 together in order to form superior adhesive bonding between layers 83 and 85 and 84 and 85 of Valyi.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the resin composition comprising polyester and polyurethane as the material of the carrier layer 85 of Valyi, along with an antioxidant as taught by both Valyi and Satoh et al., as an adhesive layer, that bonds plastic barrier layers 83 and 84 together in order to form superior adhesive bonding between layers 83 and 85 and 84 and 85 of Valyi.

In regard to the limitation that the inner layer has a gas transmission rate that is greater than that of the outer layer, Valyi teaches that suitable polymers for the barrier layers are acrylonitrile copolymers, terephthalic polyesters, polyethylene terephthalates, polyvinylidene dichloride, and the like (col. 4, lines 3-8). Valyi also teaches that the particular barrier or combination of barriers employed depends upon the particular results desired (col. 4, lines 8-10). Therefore, it is well within the capabilities of one of ordinary skill in the art to select particular materials for layers 83 and 84 based on the respective gas transmission rates of the well known barrier polymers in order to produce the film of Valyi having an inner layer that has a gas transmission rate that is greater than that of the outer layer as taught by Valyi.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected particular materials for layers 83 and 84 based on the respective gas transmission rates of the well known barrier polymers in order to produce the film of Valyi having an inner layer that has a gas transmission rate that is greater than that of the outer layer as taught by Valyi.

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In regard to claim 4, Valyi teaches a multilayer container with two plastic barrier layers 83 and 84 that sandwich a carrier layer 85. Valyi fails to teach that the curing agent is selected from the group consisting of polyamines, polyols, isocyanates and organometallics. Satoh et al., however, teach the use of a crosslinking agent such as an amino resin, an amino resin with alcohol, which is a polyol, multifunctional isocyanate compounds or block isocyanate compounds (col. 16, lines 1-10). One of ordinary skill in the art recognizes that a crosslinking agent is a curing agent: curing agents crosslink polymer chains. Therefore, one of ordinary skill in the art would have recognized to use the adhesive composition of Satoh et al. that is cured by an amino resin, an amino resin with alcohol, multifunctional isocyanate compounds or block isocyanate compounds as the carrier layer 85 in order to form superior adhesive bonding between layers 83 and 85 and 84 and 85 of Valyi as taught by Satoh et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the adhesive composition of Satoh et al. that is cured by an amino resin, an amino resin with alcohol, multifunctional isocyanate compounds or block isocyanate compounds as the carrier layer 85 in order to form superior adhesive bonding between layers 83 and 85 and 84 and 85 of Valyi as taught by Satoh et al.

14. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Valyi in view of Satoh et al., and in further view of Narsutis et al. and Omura et al.

Valyi and Satoh et al. teach the container and adhesive composition as discussed above. Valyi and Satoh et al. fail to teach a flap extending from at least one side of the package, where an antioxidant adhesive is applied to surface of the flap and also fail to teach that the cured adhesive resin has a vapor transmission rate of greater than 0.2 grams per 100 square inches per

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day at 70°F and also fail to teach that the butylated phenolic antioxidant is present in a concentration between 1000 and 100,000 parts per million.

In regard to the flap limitation, Narsutis et al. teach a resealable package with flap 30 having a resealable peel seal adhesive, and further teach that the resealable peelable adhesive is applied to the flap 30 (col. 5, lines 29-35 and Figures 1-7) to enable the user to reseal the package after removing a portion of its contents. Therefore one of ordinary skill in the art would have recognized to apply the antioxidant adhesive of Valyi and Satoh et al. to the flap 30 of Narsutis et al. in order to enable the user to reseal the package after removing a portion of its contents as taught by Narsutis et al.

In regard to the limitation that the butylated phenolic antioxidant is present in a concentration between 1000 and 100,000 parts per million, Omura et al. teach the inclusion of the antioxidant 2,6-di-tert-butyl-p-cresol (BHT), also known as butylated hydroxytoluene in the amount of up to a maximum of 10 parts per 100 parts by weight of the polymerizable monomers (col. 31, line 22), corresponding to a maximum of 100,000 parts per million. Since Omura et al. establish an antioxidant concentration of up to 100,000 parts per million as a suitable concentration to use in an adhesive composition, one of ordinary skill in the art would have recognized to use an antioxidant concentration of between 1,000 and 100,000 parts per million by weight as taught by Omura et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the antioxidant adhesive of Valyi and Satoh et al. to the flap 30 of Narsutis et al. in order to enable the user to reseal the package after removing a portion of its contents as taught by Narsutis et al., and to have used an antioxidant concentration of between

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1,000 and 100,000 parts per million by weight of the adhesive composition of Valyi and Satoh et al., since Omura et al. teach that an antioxidant concentration of up to 100,000 parts per million as a suitable concentration to use in an adhesive composition.

In regard to the limitation that the cured adhesive resin has a vapor transmission rate of greater than 0.2 grams per 100 square inches per day at 70°F, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have tailored the material of Valyi and Satoh et al. according to molar amounts of polyester and polyurethane in the composition, etc. in order to achieve a vapor transmission rate of greater than 0.2 grams per 100 square inches per day at 70°F, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).


Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B Aughenbaugh whose telephone number is 703-305-4511. The examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 703-308-4251. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

wba
09/06/02


HAROLD PYON
SUPERVISORY PATENT EXAMINER
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9/8/02